

Amendments to the Drawings:

Figures 1 and 2 have been amended as indicated in the replacement sheet attached hereto. These drawings have been amended to indicate they are prior art.

REMARKS

Claim 1-9 are pending. The specification has been amended. The drawings have been amended. The Specification has been amended.. Claims 1-9 have been amended. No new matter has been added by way of the amendment. Reconsideration of the application, as amended, is respectfully requested.

The drawings have been objected to based on the failure to indicate that Figs. 1 and 2 are prior art. In response to this objection, Applicant has amended Figs. 1 and 2 in the required manner. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

In the Office Action mailed January 24, 2005, the Examiner required under 37 C.F.R. §1.72(b) that an Abstract on a separate sheet be filed (Office Action, pgs. 2-3). Applicants note that the present application is a U.S. national stage application of international stage PCT application No. PCT/F100/00174, a published pamphlet version of which was included in the filing papers of this national stage application as WO 00/54434. The abstract appeared on the cover sheet of the published pamphlet version of the PCT application. As stated at §1893.03(e) of the MPEP (emphasis added):

When the international application is published as the pamphlet, the abstract is reproduced on the cover page of the publication, even though it appears on a separate sheet of the international application in accordance with PCT Rule 11.4(a). Thus the requirement of 37 C.F.R. §1.52(b) that the abstract “commence on a separate sheet” does not apply to the copy of the application (pamphlet) communicated to the designated Offices by the International Bureau under PCT Article 20. Accordingly, it is improper for the examiner of the U.S. national stage application to require the applicant to provide an abstract commencing on a separate sheet if the abstract does not appear on a separate sheet in the pamphlet. Unless the abstract is properly amended under the U.S. rules during national stage processing, the abstract that appears on the cover page of the pamphlet will be the abstract published by the USPTO under 35 U.S.C. §122(b) and in any U.S. patent issuing from the application.

Therefore, in the present national stage application, the filing of the original Abstract on a separate sheet is not necessary. Withdrawal of the objection is respectfully requested.

The specification has been objected to based certain informalities. Specifically, the Examiner has stated that “transmitter unit 107” on pg. 2, line 18 should be “transmitter 111”. In addition, the Examiner has stated that “GMS” on pg. 9, line 16 should be “GSM”. In response to these objections, Applicant has amended the specification in a self-explanatory manner.

Therefore, reconsideration and withdrawal of the objection to the specification are in order, and a notice to that effect is earnestly solicited.

Claims 1 and 3 were objected to based on certain informalities. Specifically, the Examiner has stated that the term “substantially” in claims 1 and 3 is a relative term which renders the claim indefinite. In response to these objections, Applicant has appropriately amended the claims. Consequently, reconsideration and withdrawal of the objection to the claims are respectfully requested.

In the January 24, 2005 Office Action, independent claims 1 and 3 were rejected under 35 U.S.C. §102(b) as being anticipated by PCT Publication No. WO 97/21287 (“*Magna*”), while dependent claims 2 and 4 were rejected under 35 U.S.C. §103(a) as being obvious over *Magna* in view of PCT Publication No. WO 99/26437 (“*Lenzo*”). Lastly, dependent claims 5-9 were rejected under 35 U.S.C. §103(a) as being obvious over *Magna* in view of U.S. Patent No. 5,617,412 (“*Delprat*”).

The claimed invention relates to data transmission in a microwave link system via point-to-multipoint connections. The claimed system utilizes both frequency and time division duplex arrangements to simplify substation structures. In accordance with the invention, a substation transmits at different times than it receives, and uses different frequencies for transmission and reception. A central station, in turn, includes a duplexer unit, whereby it can both transmit and receive simultaneously when the transmission and reception frequencies are spaced sufficiently apart (see Abstract of the disclosure).

Independent method claim 1 has been amended to recite the steps of “transmitting a time division multiplex signal at a first frequency from the central station; and receiving at the central station signals of said at least one substation at a second frequency, said second frequency being a different frequency than said first frequency and said signals of said at least one substation at said second frequency forming a time division multiple access signal”. Independent method claim 1 has also been amended to recite the limitations “each of said at least one substation receives, within an initial time period having time slots, at said first frequency during certain first time periods having one or more time slots and corresponding to a specific substation; and ... said specific substation transmits, within said initial time period, at said second frequency during certain second time periods having one or more time slots corresponding to said specific substation such that said first time periods are different time periods than said second time periods”. Support for these

amendments may be found at pg. 4, lines 28-33, pg. 7, lines 5-33 and Figs. 4 and 5 of the originally filed specification. No new matter has been added.

Magna relates to a method for radio frequency communications between a first unit and a second unit which includes the steps of transmitting during a first time interval over a first frequency by the first unit, receiving during the first time interval over the first frequency by the second unit, transmitting during a second time interval over a second frequency by the second unit, receiving during the second time interval over the second frequency by the first unit. The method disclosed in *Magna* also includes the step of setting a select frequency shift between the first frequency and the second frequency (see Abstract). However, *Magna* fails to teach the present claimed invention. That is, *Magna* fails to teach the steps of “transmitting a time division multiplex signal at a first frequency from the central station; and receiving at the central station signals of said at least one substation at a second frequency”.

In the invention recited in claim 1, the “second frequency [is] a different frequency than [the] first frequency and [the] signals of [the] at least one substation at [the] second frequency [form] a time division multiple access signal, [where] each of [the] at least one substation receives, within an initial time period having time slots, at [the] first frequency during certain first time periods having one or more time slots and corresponding to [the] a specific substation; and [where the] specific substation transmits, within [the] initial time period, at [the] second frequency during certain second time periods having one or more time slots corresponding to [the] specific substation such that [the] first time periods are different time periods than [the] second time periods”. *Magna* fails to teach these aspects of the claimed invention, recited in independent claim 1.

Moreover, the communication disclosed in *Magna* occurs between a first unit and a second unit, e.g., a cordless telephone and a cordless base set (see pg. 3, line 10-11). In the present claimed invention, communication occurs between a central station and a plurality of substations. In *Magna*, both the first unit and the second unit switch between transmit and receive (see pg. 8, lines 20-25). In the present claimed invention, however, the transmit and receive timeslots of each substation are scheduled so that the central station transmitter and receiver can both operate with virtually full continuous load (as in a FDD system). This holds true even in the case where, for a single substation, transmission and reception never occur simultaneously (as in a TDD system). *Magna* only teaches the possibility of using different frequencies between specific directions in a TDD system. *Magna* fails to teach the present invention, because *Magna* only discloses point-to-point

TDD technology, which is disclosed in the background section of Applicant's originally filed specification. In view of the foregoing, independent method claim 1 is patentable over the *Magna*, and therefore withdrawal of the rejection under 35 U.S.C. §102 is requested, and a notice to this effect is earnestly solicited.

Lenzo relates to a system that utilizes a mixed, or hybrid, division duplex mechanism such that the uplink and downlink transmissions are separated in frequency while time slots associated with transmission and reception are also separated in time (see pg. 2, lines 23-26). *Lenzo* states (pg. 2, lines 26 to pg. 3, line 2), the hybrid duplex scheme, i.e., frequency-time division duplex (FTDD), allows alternative division duplex mechanism to be selectively implemented within a communications system without requiring modification of the basic system hardware architecture. However, *Lenzo* fails to cure the deficiency of *Magna*, since it too fails to teach or suggest the limitation "each of said at least one substations receives within an initial time period having time slots ... and transmits within said initial time period...", as recited in amended independent claim 1.

Delprat relates to half-duplex radio systems in which a mobile station cannot send and receive simultaneously data (see col. 1, lines 7-9). *Delprat* fails to cure the deficiency of the system achieved by the combination of *Magna* and *Lenzo*, because *Delprat* also fails to teach or suggest limitation "each of said at least one substations receives within an initial time period having time slots ... and transmits within said initial time period...", as recited in amended independent claim 1. Accordingly, independent claim 1 is patentable over the combination of *Magna*, *Lenzo* and *Delprat*, and therefore withdrawal of the rejection under 35 U.S.C. §103 is requested, and a notice to that effect is earnestly solicited.

Independent claim 3 is the system claim associated with the implementation of independent method claim 1. Accordingly, independent system claim 3 is patentable over the combination of *Magna*, *Lenzo* and *Delprat* for the reasons discussed above with respect to independent method claim 1.

In view of the patentability of independent claims 1 and 3, for the reasons set forth above, dependent claims 2 and 4-9 are all patentable over the prior art.

Based on the foregoing amendments and remarks, this application should be in condition for allowance. Early passage of this case to issue is requested.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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